

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-09-25 15:02:29
 Date of Next Testing: 2027-09-24 15:02:29
 Product Name: **β-Nicotinamide adenine dinucleotide phosphate hydrate**
 CAS Number: 53-59-8 (anhydrous)
 Specifications & Purity: 95%
 Lot #: I2321798
 SKU #: **N101669**
 Version: **1**
 Analysis #: **271066**
 Storage Temperature: Store at -20°C

| Parameter | Limit Values | Result |
|--|--|--|
| Sodium(Na) | 0-0.04 (%) | 0.02 % |
| Water by Karl Fischer | 0-9 (%) | 3.49 % |
| Purity(HPLC) | 95-100 (%) | 99.13400 % |
| Potassium(K) | 0-0.04 (%) | 0.03 % |
| Solvent Content | 0-4 (%) | 2.05 % |
| Appearance (N101669) | White to Off-White Powder or Solid or Chunks | White to Off-White Powder or Solid or Chunks |
| Solubility in H ₂ O , Colorless to Faint Yellow , Clear , 50 mg/ml H ₂ O | pass | Pass |
| Proton NMR spectrum | Conforms to Structure | Conforms to Structure |
| Phosphorus NMR Spectra | Conforms to Structure | Conforms to Structure |



John Su
QA & QC Manager